UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,480	04/02/2004	Claudio P. Plaza	51991/W112	7287

23363 7590 07/29/2010
CHRISTIE, PARKER & HALE, LLP
PO BOX 7068
PASADENA, CA 91109-7068

EXAMINER	
PEFFLEY, MICHAEL F	
ART UNIT	**PAPER NUMBER**
3739	

MAIL DATE	DELIVERY MODE
07/29/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/820,480
Filing Date: April 02, 2004
Appellant(s): PLAZA, CLAUDIO P.

Lauren E. Schneider
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 15, 2010 appealing from the Office action mailed January 15, 2010.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-30 are pending and rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

6,405,078	MOADDEB et al	6-2002
6,458,127	TRUCKAI et al	10-2002
4,844,099	SKALSKY et al	7-1989

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moaddeb et al (6,405,078) in view of the teachings of Skalsky et al (4,844,099) and Truckai et al (6,458,127).

Moaddeb et al disclose the same basic catheter device as set forth in the instant application claims. The device includes a catheter body (12) having proximal and distal ends, a tip section (14) at the distal end of the catheter. The tip section includes a porous tip electrode (Abstract) and there is an irrigation tube (38) extending through the catheter and into the porous tip. The Moaddeb et al catheter is substantially identical to applicant's disclosed catheter, except the electrode is disclosed as being formed from a conductive, sintered material and the instant application claims call for a tip electrode having a non-conductive porous material with a conductive porous coating.

Skalsky et al teach that it is known to form a tip electrode from a non-conductive porous material, then provide the non-conductive material with a conductive porous coating (col. 6, lines 28-32). This construction presents a less-expensive electrode since the majority of the electrode is comprised of an inexpensive non-conductive porous material and the conductive coating results in far less high-cost material required to make the electrode element. Skalsky et al fail to disclose a thickness for the coating within the applicant's 0.2-2 micrometers.

The examiner maintains that the thicknesses used for coatings are generally known to those of ordinary skill in the art. In particular, it is noted that applicant's specification fails to disclose any criticality or unexpected result with the claimed and disclosed thickness of 0.2-2 micrometers. Paragraph [0035] of the printed publication merely state that this is a preferable range to provide perfusion, and that other ranges may be used. Further, the examiner maintains that it is generally known in the art to provide conductive coatings with thicknesses in the ranges set forth by applicant. Truckai et al disclose another RF device that provides a non-conductive substrate (12) that is coated with a conductive coating (40). In particular, Truckai et al disclose a wide range of thicknesses for the coatings including 0.00001 inches, which is about 0.25 microns (col. 6, lines 59-65). Hence, Truckai et al disclose a wide range of conductive coating thicknesses, and particularly the use of coatings having a thickness as small as about 0.2 microns.

To have provided the Moaddeb et al device with an electrode made from a non-conductive, porous material having a conductive, porous coating to reduce the effective

cost of the device would have been an obvious modification for one of ordinary skill in the art, particularly since Skalsky et al fairly teach that it is known to create a porous electrode device from a non-conductive material having only a conductive coating on the surface. To have further provided the coating with any reasonable thickness, including a thickness of 0.2 microns, would have been an obvious design consideration since Truckai et al fairly teach that conductive coatings of that thickness are generally known in the art.

(10) Response to Argument

Applicant argues that there is no reasonable expectation of success in combining the Skalsky teaching with the Moaddeb device, and that the combination of the Skalsky teaching with the Moaddeb device would necessarily result in a significant change in the respective function of the claimed elements. The examiner disagrees.

As asserted in previous Office action, Skalsky is cited merely as a teaching of the known methods of making a porous electrode. The function of the electrode is immaterial to the rejection. It is clear that Moaddeb teaches a catheter system having a porous electrode, the electrode being made from a conductive material. It is also clear that Skalsky teaches a catheter having a porous electrode. The Skalsky porous electrode is comprised of a non-conductive substrate provided with a porous coating (col. 6, lines 28-32). The examiner maintains that forming the Moaddeb electrode in such a manner (i.e. with a non-conductive base and a conductive coating) would be an obvious design consideration given the teaching of Skalsky. The test for obviousness is not whether the features of a secondary reference may be bodily

incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). The examiner maintains that despite the fact that the Skalsky reference is a pacing lead and is intended to promote tissue ingrowth, one of ordinary skill in the art would nevertheless recognize that porous electrodes may be formed by providing a conductive porous coating over a non-conductive porous substrate. Further, the skilled artisan would recognize the application of such a modification on the Moaddeb electrode device. While the Skalsky structure may promote tissue ingrowth, it still remains a viable teaching of an alternative means for forming a porous electrode. Even if one were to "bodily incorporate" the Skalsky electrode on the Moaddeb device, there would be no expectation of tissue ingrowth because the Moaddeb device is not left in place as is the Skalsky lead. However, it is the examiner's position that those of ordinary skill in the art would not look to bodily incorporate the Skalsky structure onto the Moaddeb device. Rather, the skilled artisan would recognize that Skalsky teaches that porous electrodes may be formed by providing a conductive coating on a non-conductive, porous substrate and would then be fully capable of providing such a coated electrode appropriate for use on the Moaddeb catheter.

Regarding the Truckai teaching, applicant asserts that the Skalsky coating is much thicker than the coating claimed and there is no suggestion for providing the coating in a thickness range as claimed. The examiner again disagrees. Again,

applicant's arguments are directed solely to the exact structure and intended use of the Skalsky reference and fails to appreciate the simple teaching that Skalsky provides, namely that porous electrodes may be formed as a non-conductive substrate with a conductive coating. Those of ordinary skill in the art would recognize the appropriate coating thicknesses that would be provided to electrodes having different functions. While Skalsky is interested in promoting tissue ingrowth and therefore uses a thick coating, the examiner maintains that those of ordinary skill in the art would recognize that electrodes of different functions (e.g. ablation or coagulation) would provide the coating in a manner appropriate for the electrode function. To that extent, Truckai discloses appropriate coating ranges for electrodes used to ablate/coagulate tissue, and the examiner maintains that such a coating would be appropriate for the Moaddeb electrode which is also used in ablation/coagulation procedures. That Truckai fails to specifically disclose a porous coating is immaterial to the rejection, since the teaching of a porous coating is already suggested by the Skalsky reference. Truckai merely provides the teaching of relevant coating thickness used in coagulation/ablation electrodes such as taught by Moaddeb.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Michael Peffley/
Primary Examiner, Art Unit 3739

Conferees:

/Linda C Dvorak/

Supervisory Patent Examiner, Art Unit 3739

/Tom Hughes/

TQAS, TC 3700